

**BACTERIAL LEAF BLIGHT OF SCHEFFLERA ARBORICOLA
CAUSED BY PSEUDOMONAS CICHORII**

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Schefflera arboricola (Hyata) Merrill, dwarf schefflera, a native of tropical Asia, is a much-branched, evergreen shrub or tree which can grow 10 to 25 feet tall (4). It has replaced the traditional schefflera (Brassaia actinophylla Endl.) in many instances because of fewer foliar fungal diseases and less growing problems. Most dwarf schefflera are acclimated for indoor use by being produced in 47 to 55% shade. They grow best at 65-90°F, but can withstand 35 to 105°F without chilling or heat damage (3).

Recently, a severe foliage blight of dwarf schefflera occurred, with 75% of the plants in one nursery affected. The bacterium Pseudomonas cichorii (Swingle) Stapp was consistently associated with these symptoms (1).



Fig. 1. Pseudomonas cichorii on Schefflera arboricola. A) Leaves showing watersoaked blotches following artificial inoculation. B) Natural infections, with large, irregular lesions showing tan or gray centers. Photos courtesy of Dr. A. R. Chase.

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Symptoms. Lesions are initially water-soaked areas 2-4 mm wide on all parts of the leaf laminae (Fig. 1A). They enlarge to 1-2 cm within a week and have either black or tan centers (Fig. 1B). Severly affected leaflets abscise (1). Lesion numbers and size are reduced significantly as fertilizer levels are increased. Lesion number and size decrease as leaf age increases. Light levels have no effect on the number of lesions that form (2).

Control. Bactericides are not very successful in controlling this disease. Control must be based on maintenance of dry foliage and removal of infected leaves and/or plants from the growing area to reduce spread to healthy plants (3). It is best not to grow the schefflera next to plants which also may be hosts, such as Fatsia japonica, Dizygotheca elegantissima, Gerbera jamesonii, and Chrysanthemum morifolium.

Survey and Detection. Look for initial watersoaked blotches on the leaves, which later become black or tan with some centers of each color.

Literature Cited

1. Chase, A. R. and D. D. Brunk. 1984. Bacterial leaf blight incited by Pseudomonas cichorii in Schefflera arboricola and some related plants. Plant Disease 68:73-74.
2. Chase, A. R. and J. R. Jones. 1986. Effects of host nutrition, leaf age, and preinoculation light levels on severity of leaf spot on dwarf schefflera caused by Pseudomonas cichorii. Plant Disease 70:561-563.
3. Conover, C. A., A. R. Chase, and L. S. Osborne. 1983. Brassaia and Schefflera. University of Florida, IFAS, Agricultural Research Center, Apopka. ABC-A Foliage Plant Research Note BH-1983-8. 7 pp.
4. Everett, T. H. 1982. The New York Botanical Garden Illustrated Encyclopedia of Horticulture. p. 3075. Garland Publishing, New York, 10 volumes.

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